

REMARKS

Reconsideration of the application is requested in view of the above amendments and the following remarks. Claims 2, 3, 9, 13 and 14 have been canceled. Claims 4, 6, 7, and 10-12 have been amended. New claims 15-21 have been added. Claims 4-7, 10-12 and 15-21 are pending in the application. Support for new claims 15 and 16 can be found at page 7, lines 24-28 of the specification. Changes made to claims by the current Amendment are shown in the attached **Version With Markings To Show Changes Made**.

Claims 2-7 and 9-12 were objected to for improper dependencies. Claims 2, 3 and 9 have been canceled. Claims 4, 6, 10 and 12 have been amended to include proper dependencies. Withdrawal of the objection is requested.

Claims 6-7 and 11-12 were rejected under 35 USC § 112, second paragraph, as being indefinite. Claims 6, 7, 11 and 12 have been amended to remove the term "hard." Applicants submit that these claims are now in proper form for allowance.

Claims 2, 3, 9, 13 and 14 were rejected under 35 USC § 102(b) as being anticipated by JP 62-124622 ('622). Claims 2, 3, 9, 13 and 14 have been canceled, rendering this rejection moot as to these claims. Applicants do not concede the correctness of this rejection.

Claims 13 and 4 were rejected under 35 USC § 102(b) as being anticipated by JP 55-70935 ('935). Claim 13 has been canceled, rendering this rejection moot as to that claim. Claim 4 has been amended to depend from new claim 15. Applicants submit that new claim 15 is allowable over the '935 reference as discussed below. Therefore, claim 4 is allowable for at least the reason that it depends upon an allowable base claim.

To the extent that the above rejection of claims 13 and 14 are applicable to new claims 15 and 16, Applicants present the following distinctions between the '622 and '935 patents (hereinafter referred as "the references") and claims 15 and 16.

Claim 15 and 16 are directed to a "master information carrier." A master information carrier has information signals that are eventually recorded on a "magnetic recording medium." The master information carrier of the present invention is distinctive from a magnetic recording

medium as disclosed in the references in purpose, configuration, and technical affects, as described below.

The references disclose dividing a magnetic recording layer of a magnetic recording medium into micro-regions smaller than a recording wavelength and separating the micro-regions magnetically, thereby improving the recording and reproducing performance as a magnetic recording medium. The magnetic micro-regions in the references have a diameter smaller than a recording wavelength and are arranged distinctly and uniformly. Further, the magnetic micro-regions are separated from each other by a non-magnetic region. The magnetic micro-regions are only uniformly arranged, and the arrangement itself does not contain any information. Thus, the magnetic recording medium of the references should be provided with information to be stored magnetically by a magnetic head.

The master information carrier of claims 15 and 16 requires a ferromagnetic film arrangement that corresponds to the arrangement of information signals. That is, the master information carrier originally includes information signals provided in a geometrical configuration, such as the arrangement of the ferromagnetic film. The signals of the geometrical configuration are transformed to magnetic signals and are stored on a magnetic recording medium. The master information carrier does not itself include magnetically recorded information in addition to the configured information signals.

Thus, a master information carrier as claimed in claims 15 and 16 is not a magnetic recording medium, but rather a member used for recording information signals on a magnetic recording medium. The master information carrier is required to be composed of a ferromagnetic film having a different composition from that of a magnetic layer used for the magnetic recording medium disclosed in the references. The master information carrier of claims 15 and 16 is composed of a ferromagnetic film made of a material selected from the group consisting of CoFe and an alloy comprising Co or Fe as a main component. On the other hand, the references disclose a barium ferrite magnetic powder or Fe-Ni plated layer formed on an Al conductive layer as the magnetic layer of the magnetic recording medium. Such a magnetic film may be useful for the magnetic recording medium, but cannot be used for the master information carrier of claims 15 and 16.

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Further, the master information carrier of claims 15 and 16 requires a non-magnetic solid material selected from the group consisting of SiO₂, Al₂O₃, Cu, Ag and an alloy comprising Cu or Ag as a main component. These materials are not disclosed by the references for use in a master information carrier.

In view of the above, Applicants submit that claims 15 and 16 are allowable over the '622 and '935 references, alone or in combination.

Claims 11 and 12 were rejected under 35 USC § 103(a) as being unpatentable over JP 62-124622 in view of JP 61-190719 ('719). Applicants traverse this rejection. According to the above discussion, the '622 reference fails to disclose every limitation of new claim 16, from which claims 11 and 12 depend. The '719 reference fails to remedy the deficiencies of the '622 reference. Therefore, Applicants submit that claims 11 and 12 are allowable over the '622 and '719 references.

Claims 5-7 were rejected under 35 USC § 103(a) as being unpatentable over JP 55-70935 in view of JP 61-190719. Applicants traverse this rejection. Claims 5 and 7 have been amended to depend from new claim 15. As discussed above, claim 15 is allowable over the '935 reference. The '719 reference fails to remedy the deficiencies of the '935 reference. Therefore, Applicants submit that claims 5-7 are allowable over the '935 and '719 references. Withdrawal of the rejection is requested.

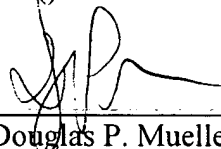
In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.

Respectfully submitted



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Please cancel claims 2, 3, 9, 13 and 14.

Please amend claims 4, 6, 7 and 10-12 as follows:

4. (Once Amended) A master information carrier according to claim [1]15, wherein said non-magnetic solid material comprises a polymer material.

6. (Once Amended) A master information carrier according to claim [1]15, wherein a [hard] protective film [of 20nm or less in thickness] is formed on the surface of said ferromagnetic film and said non-magnetic solid material.

7. (Once Amended) A master information carrier according to claim 6, wherein the [hard] protective film comprises [a] carbon as a main component formed by sputtering.

10. (Once Amended) A master information carrier according to claim [8]16, wherein the cross section of said ferromagnetic film in a bit length direction of the [digital] information signals has a substantially trapezoidal shape with an upper side at the surface that is longer than a lower side on the substrate.

11. (Once Amended) A master information carrier according to claim [8]16, wherein a [hard] protective film [of 20nm or less in thickness] is formed on the surface of said substrate and said ferromagnetic film filled in the recessed portions.

12. (Once Amended) A master information carrier according to claim 11, wherein said [hard] protective film comprises [a] carbon as a main component formed by sputtering.

Please add new claims 15-21.
